

BARSUKOV, A.A., inzh., laureat Leninskoy premii; BORISOV, Yu.S., inzh.; VAKS, D.I., inzh.; VLADZIYEVSKIY, A.P., doktor tekhn. nauk; prof., laureat Stalinskoy premii; GINEZBURG, Z.M., inzh.; GLEZER, V.Ye., inzh.; ZOBIN, V.S., inzh.; KAZAK, M.I., dots.; KAMINSKAYA, V.V., kand. tekhn. nauk; KEDRINSKIY, V.N., inzh., laureat Leninskoy premii; KUCHER, A.M., kand. tekhn. nauk; KUCHER, I.M., kand. tekhn. nauk; LEVINA, Z.M., inzh.; LUK'YANOV, T.P., inzh.; MOROZOVA, Ye.M., inzh.; NOSKIN, P.A., kand. tekhn. nauk, dots.; NIBERG, N.Ya., kand. tekhn. nauk; OSTROUMOV, G.A., inzh.; PLOTKIN, I.B., inzh.; SPIVAK, E.D., kand. tekhn. nauk; SUM-SHIK, M.R., inzh.; SHASHKIN, P.I., inzh.; SHIFRIN, S.M., inzh.; YAKOBSON, M.O., doktor tekhn. nauk, prof.; GLINER, B.M., inzh., red.; SOKOLOVA, T.F., tekhn. red.

[Handbook for mechanics of machinery plants in two volumes]
Spravochnik mekhanika mashinostroitel'nogo zavoda v dvukh tomakh.
Vol.1. [Organization and design preparation for repair work]
Organizatsiya i konstruktorskaya podgotovka remontnykh rabot.
Otv. red. toma R.A. Noskin. 1958. 767 p. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry. (MIRA 11:8)
(Machinery—Maintenance and repair)

B.C. 150 V. Y. 2.

ANTOSHIN, Ye.V.
- 1959
A 3
PLANE I BOOK EXPLODE

1363

THEATRE I BOOK SEVEN

power equipment	Manufacture and sale
parts and accessories	of basic parts for forging and pressing
equipment (disassembly, Z.I.R., Engineer)	
equivalent labour	
new labour	
periodical forming machines	
beam-type presses	
crash presses	
machines and manufacture of parts for hoisting machinery	
(disassembly, Z.I.R., Engineer; and Shalyay, I.L., Engineer)	
material requirements	
general material requirements	
traveling wheels	
load-grabbing elements	
forks	
blocks	
Manufacture of metallic parts (factory, Z.I.R., Engineer)	
stationary casting	
method of casting	
centrifugal method of casting	
Manufacture of metallic worm gears, nuts, and other parts	
0/1/06	

卷一
九/六

B6 R1504 Y4.3.

ANTOSHIN, Ye.V.

•85(5)

PHASE I BOOK REPRODUCTION

B6V/1351

Reproducible handbook on maintenance and repair of metal structures and equipment
No. 22 Technical Library Institute
(Handbook for Mechanics of Machine-building
Plants in Two Volumes, Vol. 2: Techniques of Repair Operations) Moscow,
Machine Press, 1959. Vol. 1, 1959 p., 40,000 copies printed.

Language: Russian; Eds. of Set: Yu.S. Borisov, Engineer; A.P. Vatutin, M.I.
Savchenko, M.A.; T.S. Slobtsova; Eds. of Sect.: Yu.S. Borisov, Candidate of Technical Sciences;
Section of Technical Sciences, and N.A. Bochik, Candidate of Technical Sciences;
Savchenko M.I. for Reference Literature (Materials); V.I. Myzny, Engineer.

PURPOSE: This handbook is intended for personnel responsible for repair and maintenance operations in a machinery-manufacturing plant.

CONTENTS: The handbook contains information pertinent to the organization of repair and maintenance operations, design-preparation of maintenance work, and plants participating in preparation of this volume is included in the coverage of Volume 1 (507/359). There are no references. Basic topics covered include: reconditioning and making of parts in maintenance operations; metal-working; welding, and pipe-fitting; finishing operations involved in maintenance work; cleaning parts for precision; basic hand and assembly work; maintenance of power equipment; and maintenance of foundations.

Parts made of metal powders (Sakharov, V.F., Engineer)

Basic data

The use of parts made of metal powders in maintenance of equipment

New materials

Technology of manufacturing parts from metal powders

The use and manufacture of nonmetallic parts and products in maintenance of equipment

Parts made from plastic laminated wood (Budrik, M.A., Engineer)

Plastic materials (Larionov, A.G., Candidate of Technical Sciences)
Plastic numbers, friction discs and rubberized belts (Oshur', M. Sh., Engineer and Veterinarian; A.M. Matrosov)
Protective rubber coatings (Novikov, Ya. S., Engineer)

a. II. Manufacturing, Molding, and Pipe-Fitting Operations in Maintenance of Equipment

Parts with assembly tools (Kuznetsov, I.A., Engineer)

Stamping tools

Machining of blanks

Chisels and cope chisels

363

363

367

367

370

372

372

395

395

396

396

396

396

396

396

396

396

396

396

396

Card 10/26

Dok. 150 N, Y4.3.

ANTOSHIN, Ye.V.

6(5)

PAGE 1 BOOK INFORMATION

Sov/361

Spetsroznim nauchno-tekhnicheskoy servisnye v drush tsvetach.

Vol. 2: Tekhnologiya remonta (Handbook for Mechanics or Machine-building Plants) In Two Volumes. Vol. 2: Technological of Repair Operations) Moscow, 1959. Vol. 1059 P. No. 000 copies printed.

Auth. N.I.: T.S. Burov, Budzheri Ed.; K.G. Teplo, Moshnitski Tech. Ed.; G.P. Slobolov, Ed. of Set; Yu.S. Borilev, Engineer, A.P. Vladimirov, Doctor of Technical Sciences, and B.A. Nikita, Candidate of Technical Sciences; Manager Ed. for Reference Literature (Mechanics); V.I. Krylov, Engineer.

NOTES: This handbook is intended for personnel responsible for repair and maintenance operations in a machine-manufacturing plant.

CONTENTS: The handbook contains information pertinent to the organization of repair and maintenance operations, design preparation or maintenance work, and economics of maintenance. Information on scientific research organizations and plants participating in preparation of this volume is included in the coverage of Volume 1 (Sov/1559). There are no differences. Basic topics covered include: repair operations and nature of parts in maintenance operations involved in metal-working, welding, and pipe-fitting; machine operations involved in maintenance parts; checking parts for precision; basic bench and assembly work; maintenance of power equipment; and maintenance of foundations.

Ch. III. Finishing Operations in Maintenance of Equipment

Decorative grinding (Borilev, Yu. S., Engineer)
Polishing (Borilev, Yu. S., Engineer)

Mechanical and chemical mechanical polishing
Hydraulic polishing
Electrochemical polishing

Part 15/6

133-58-5-2/31

AUTHORS: Lokshin, Ye. M. and Borisov, Yu. S., Engineers
TITLE: Intensification of the Blast Furnace Process by Changing
the Composition of Blast (Intensifikatsiya domennogo
protsesssa izmeneniyem sostava dut'ya)

PERIODICAL: Stal', 1958, Nr 5, pp 391-397 (USSR)

ABSTRACT: The choice of the most effective compositions of blast
is difficult due to lack of calculating and experimental
data, scientifically based, which characterise possible
changes in the course of various blast furnace processes
on the transfer from one kind of blast to a blast of a
different composition. In order to establish the
possibility, expediency and an approximate economic
effectivity of individual compositions of blast furnace
blast as well as rational conditions of their practical
utilisation, a method of calculating indices of the blast
furnace performance, based on drawing up zonal heat
balances was developed. In the light of present views on
heat exchange in a blast furnace, it is possible to limit
its division into two zones, the boundary between which
is the temperature of the zone of slowed down heat
exchange. In the calculations such a development of all
blast furnace processes is taken at which this temperature

Card 1/6

133-58-5-2/31

Intensification of the Blast Furnace Process by Changing the
Composition of Blast

is within the limits, corresponding to operating conditions of the best Soviet furnaces. The first approximate method of taking into account the kinetics of reduction in a blast furnace was developed on the basis of laboratory investigations carried out on a special large installation of VNIIIMT. The reduction of pellets was carried out in a layer at temperatures 800-970°C with gases containing from 32 to 70% of reducing components ($\text{CO} + \text{H}_2$). The linear gas velocity 1.2 to 1.5 m^3/min . As a criterion for the reducing ability of gas the value of kg - the weight of metallic iron formed during the reduction of briquettes with $\ln \text{ m}^3$ of gas during 1 minute. The relationship between kg and total % of $\text{CO} + \text{H}_2$ in gas is practically linear (Fig.3). In order to maintain in the furnace normal aerodynamic conditions it is necessary to secure the constancy of the amount of gas passing through the furnace in a unit of time and to retain the distribution of temperatures in the furnace. The main parts of the method of calculating are outlined in a general form.

Card 2/6

133-58-5-2/31

Intensification of the Blast Furnace Process by Changing the
Composition of Blast

These are: A. Calculation of material characteristic of raw materials. As starting data for the calculation the composition of raw materials, composition of pig and slag, the degree of transfer of the individual elements into iron and slag, the yields of pig t/t and slag t/t, consumption of fluxes t/t, the consumption of carbon on direct reduction and the amount of carbon burned at tuyeres. B. Calculation of zonal heat balances. The furnace was divided into three zones: zone of intensive heat exchange (bottom part) and the zone of slow heat exchange (middle part) and the zone of well developed heat exchange (top part). The division is shown in Fig.1. C. Calculation of the combustion process in the tuyere zone. D. Calculation of the degree of direct reduction. E. Determination of blast furnace performance indices. Calculations were carried out for blasts containing coke oven, natural, producer, blast furnace and carbon dioxide gases, oil and steam. Two methods of utilising coal dust were also considered: a) blowing in hot gas ($1600-1700^{\circ}\text{C}$) obtained on gasification of coal dust in generators of the

Card 3/6

133-58-5-2/31

Intensification of the Blast Furnace Process by Changing the
Composition of Blast

cyclone type; b) blowing in natural coal dust. According to the calculated results all additions to the air blast can be divided into three groups: 1) consuming heat in the tuyere zone (steam, CO₂, blast furnace gas); 2) evolving heat in the tuyere zone (coke oven and natural gas, oil, etc.); 3) comparatively neutral in respect of heat consumption in the tuyere zone (producer gas etc.). A specific feature of all additions is a decrease in the combustion temperature in the tuyere zone. For the additions of the second and third group a decrease in the intensity of the combustion of coke at tuyeres is also characteristic. All these deficiencies limit the application of any of the above additions, but can be overcome by oxygen enrichment of blast. The dependence of oxygen consumption (m³/t of pig) on the type and proportion of an addition to blast - Fig.5; the influence of additions of steam (A), natural gas (B) and producer gas (V) on the output (a), coke rate (b), cost of pig (v), calorific value of top gas (g) - Fig.6; the influence of additions of oil (A), cyclone semi-gas (B) and coal dust (V) on the output (a) and coke rate (b) - Fig.7.

Card 4/6

133-58-5-2/31

Intensification of the Blast Furnace Process by Changing the
Composition of Blast

Conclusions: 1) For a successful application of all types of additions to the blast its simultaneous oxygen enrichment is necessary. 2) The calculations indicated that an enrichment of blast furnace blast with oil, natural, coke oven and producer gas, as well as blowing in coal dust either directly or in the form of semi-gas, obtained in a cyclone combustion chamber, should have an effective influence on the blast furnace performance. Within the limits investigated a maximum decrease of coke rate of 30-35% and an increase of output of 40% with simultaneous sharp increase in the calorific value of top gas can be expected. 3) The use of carbon dioxide and steam for blast enrichment has no advantages. 4) An increase in the temperature of preheating blast additives should be beneficial for the furnace performance. 5) It is advantageous to introduce blast additives into the tuyere zone. 6) The proposed method of calculating enables an approximate evaluation of the effect of various additions to blast furnace blast. 7) The results of Card 5/6 calculations indicate that it would be advantageous to

133-58-5-2/31

Intensification of the Blast Furnace Process by Changing the Composition of Blast

carry out semi-industrial or industrial trials with blast additives as soon as possible.

There are 7 figures and 9 references, 8 of which are Soviet, 1 English

ASSOCIATION: Ural'skiy N.-i. Institut chernykh metallov.
(Ural Scientific-Research Institute for Ferrous Metals)

Card 6/6

NOSKIN, R.A., kand.tekhn.nauk, red.; BORISOV, Yu.S., inzh., red.;
PLETNEV, V.D., inzh., red.; MIKHAYLOVSKIY, V.I., inzh., red.;
GOLOV, V.P., inzh., red.; POPOV, A.T., inzh., red.; EL'KIND,
V.D., tekhn.red.

[Modernization and repair of machinery plant equipment] Moderni-
zatsiya i remont oborudovaniia mashinostroitel'nykh zavodov. Pod
red. R.A.Noskina. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.
(MIRA 13:3)
lit-ry, 1959. 261 p.

1. Nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy pro-
myshlennosti. TSentral'noye pravleniye.
(Industrial equipment--Maintenance and repair)

BORISOV, Yu. S.

PHASE I BOOK EXPLOITATION

SOV/4601

Koordinatnoye soveshchaniye po primeneniyu kisloroda na metallurgicheskikh zavodakh Urala. Sverdlovsk, 1956

Primeneniye kisloroda na metallurgicheskikh predpriyatiyakh Urala; materialy koordinatsionnogo soveshchaniya (Use of Oxygen in Metallurgical Plants of the Urals; Materials of the Coordination Conference) Sverdlovsk, 1960. 152 p. Errata slip inserted. 1,000 copies printed.

Sponsoring Agencies: Akademiya nauk SSSR. Ural'skiy filial. Institut metallurgii; Ural'skiye pravleniya nauchno-tehnicheskikh obshchestv chernoy i tsvetnoy metallurgii.

Resp. Ed.: P.S. Kusakin, Candidate of Technical Sciences; Tech. Ed.: N.F. Seredkina.

PURPOSE: This collection of papers is intended for scientific research and technical personnel in the field of metallurgy.

COVERAGE: The use of oxygen in ferrous and nonferrous metallurgy of the Urals is discussed. Results of experimental use of oxygen in some metallurgical plants are presented. During the Conference, held December 20 and 21, 1956, the following persons (in addition to the authors) took part in

Card 1/5

Use of Oxygen (Cont.)

SOV/4601

the discussion: V.Ya. Miller, V.V. Mikhaylov, P.Ya. Sorokin, A.A. Perestoronin (all affiliated with the Institute of Metallurgy of the Ural Branch AS USSR), S.M. Kazachenko (Nizhne-Saldinsky metallurgicheskiy zavod - Nizhnyaya-Salda Metallurgical Plant), M.F. Kochin (Deceased) (Ural'skiy institut chernykh metallov - Ural Institute of Ferrous Metals), M.Ye. Kislitsin (Chelyabinsk metallurgicheskiy zavod - Chelyabinsk Metallurgical Plant), G.V. Demin (Krasnouralskiy medeplavil'nyy zavod - Krasnouralsk Copper Smelting Plant), V.A. Aglitskiy (Institut Unipromed' - "Unipromed" Institute). Some of the papers are followed by references, both Soviet and non-Soviet.

TABLE OF CONTENTS:

Introduction

3

Revebtsov, V.P. Institut metallurgii Ural'skogo filiala AN SSSR [Institute of Metallurgy of the Ural Branch of the Academy of Sciences USSR]. On the Problem of Determining Basic Trends in the Use of Oxygen in Ural Metallurgical Plants

5

Card 2/5

Use of Oxygen (Cont.)

SOV/4601

Bragin, V.T. [Institute of Metallurgy of the Ural Branch of the Academy of Sciences USSR]. Theoretical Principles in the Use of Oxygen in the Blast-Furnace Process

11

Zakharov, A.F. [Nizhne-Tagil'skiy metallurgicheskiy kombinat (Nizhniy Tagil Metallurgical Combine)]. Experimental Use of Oxygen in Blast-Furnace Operation

23

Borisov, Yu.S. [Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov (Ural Scientific Research Institute of Ferrous Metals)]. Use of Oxygen-Enriched Blast in Blast-Furnace Operation

37

Novolodskiy, P.I. [Nizhniy Tagil Metallurgical Combine]. Experimental Use of Oxygen in Open Hearth Furnaces

43

Khudyakov, N.A. [Ural Scientific Research Institute of Ferrous Metals]. Use of Oxygen in Open Hearth Furnaces

57

Mikhaylikov, S.V., and V.N. Krysov [Institute of Metallurgy of the Ural Branch of the Academy of Sciences USSR, Uralvagonzavod (Ural Railroad Car Plant)]. Experimental Use of Oxygen in the "Uralvagonzavod"

65

Card 3/5

S/117/61/000/001/006/013
A004/A001

AUTHOR: Borisov, Yu. S.

TITLE: Regulating the Organization of Repairs and Modernization of Equipment

PERIODICAL: Mashinostroitel', 1961, No. 1, pp. 15-17

TEXT: The author gives a report on the results of the All-Union Scientific-Technical Conference on Organization of Repairs and Modernization of Equipment, taking place in June, 1960, in Gor'kiy. The Conference was convened by the Tsentral'nyy i Gor'kovskiy pravleniya NTO Mashprom (Central and Gor'kiy Board of NTO Mashprom) together with the GNTK Soveta Ministrov SSSR (GNTK of the Council of Ministers of the USSR), Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu (State Committee for Automation and Mechanical Engineering at the Council of Ministers of the USSR) and the Gor'kiy Sovnarkhoz. After a short survey on the development of the system of preventive maintenance, the author points out that only after the reconstruction of the industrial administrations and the introduction of Sovnarkhozes in the Soviet economy it was possible to establish centralized and specialized enterprises to carry out preventive maintenance work and general overhaul of equipment for a number of plants.

Card 1/4

S/117/61/000/001/006/013
A004/A001

Regulating the Organization of Repairs and Modernization of Equipment

Thus the Moscow City and Oblast' Sovnarkhozes founded plants for the overhaul of metal-working machine tools and the centralized reconditioning of worn machine parts. Mechanical repair shops are being organized whose services are available to quite a number of enterprises of certain industrial fields. The Mosoblsovnarkhoz, Mosgorsovvnarkhoz and Lensovvnarkhoz have introduced the centralized overhaul of electromotors, transformers and other power equipment and devices. Several Sovnarkhozes, e. g. the Gor'kiy, Moscow City, Kuybyshev and others, have organized the serial manufacture of a number of spare parts and units for the modernization of metal-cutting machine tools. Thus, e. g. the Kuybyshev Sovnarkhoz has founded a special shop for the centralized production of gears and splined shafts, which lowers the production costs of these parts considerably and increases the quality of manufacture. Special planning and designing organizations for the repair and modernization of equipment are being created, e. g. the TsKBAM Mosgorsovvnarkhoz, VPTI Lensovvnarkhoz, PTIMASH Khar'kov Sovnarkhoz, TsPKTB Mosoblsovnarkhoz, VPTI Stroydormash of Mosgorsovvnarkhoz, etc. The Conference stated, however, that, in the whole, the work carried out by the industry in the field of improving repair facilities and modernization of equipment has not yet come up to expectations and

Card 2/4

S/117/61/000/001/006/013
A004/A001

Regulating the Organization of Repairs and Modernization of Equipment

lagged behind the tempo of development and technical improvements in industry. The Conference regretted the attitude of the Gosplan USSR, the Gosplans of the Union Republics and other central organizations and scientific research institutes, not giving adequate support to the Sovnarkhozes in the field of repair and modernization of equipment. Particularly the organization of regional Repair Plants and specialized repair enterprises leaves much to be desired. The Conference recommended the Sovnarkhozes to create and develop specialized repair plants and shops for the centralized overhaul and modernization of equipment, manufacture of spare parts and units and also to utilize for this purpose free capacities of production and mechanical repair shops. In order to speed up the organization of regional Repair Plants, the State Committee for Automation and Mechanical Engineering of the Council of Ministers of the USSR should instruct the "Giprostanok" and "Orgstankinprom" Institutes to develop standardized technical plans providing for the modernization of machine tools and other equipment which is undergoing overhaul. Another important problem being discussed by the Conference was the lack of qualified labor for repair works. Although it is imperative to have skilled repair workers at the plants, the Ministry of Higher and Medium-Level Special Education does not take steps to train qualified personnel for repair work and service of

Card 3/4

S/117/61/000/001/006/013
A004/A001

Regulating the Organization of Repairs and Modernization of Equipment

equipment, which, on the other hand, results in an insufficient mechanization and automation of production. Another point being discussed by the Conference was the most expedient pay-system for repair workers. While a certain part of the participants were in favor of the piece-rate system, others preferred time wages for repair workers, referring in particular to the difficulties of the piece-rate system arising in connection with the introduction of the seven-hour working day. The Conference recommended the Sovnarkhozes to avail themselves of the practice of the Mosoblssovarkhoz in creating special production and experimental enterprises for the strengthening and reconditioning of machine parts, these enterprises being subordinated to the sections of the Chief Mechanic and Chief Power Engineer of the Sovnarkhozes.

ASSOCIATION: Sektsiya remonta i modernizatsii Tsentral'nogo pravleniya NTO Mashprom (Repair and Modernization Department of the Central Board of NTO Mashprom)

Card 4/4

BORISOV, Yu.S.; FOFANOV, A.A.

Investigation of the blast furnace process with introduction of
liquid fuel into the hearth. Stal' 21 no.6:492-498 Je '61.
(MIRA 14:5)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov.
(Blast furnaces)
(Petroleum as fuel)

BORISOV, Yu. S.; SAKHAROV, V. P.

Mechanizing the machining of pinion teeth. Mashinostroitel'
no.12:13-16 D '62. (MIRA 16:1)

(Gear-cutting machines)

BORISOV, Yu.S.; SAKHAROV, V.P.

Devices for cutting gear racks in repair shops. Mashinostroitel'
(MIRA 16:10)
no.9:13-15 S '63.

(Gear-cutting machines)

BORISOV, Yu.S.

Urgent problems in the development of repair service.
Mashinostroitel' no.9:10-12 S '63. (MIRA 16:10)

(Industrial equipment—Maintenance and repair)

DYMISHITS, M.A.; DIDENKO, S.I., kand. ekon. nauk, retsenzent;
BORISOV, Yu.S., inzh., red.

[The organization and economics of equipment moderniza-
tion] Organizatsiia i ekonomika modernizatsii oborudova-
niia. Moskva, Izd-vo "Mashinostroenie," 1964. 136 p.
(MIRA 17:6)

BORISOV, Yu.S., inzh.

Basic theoretical principles of a system for preventive maintenance
of equipment. Vest. mashinostr. 44 no.10:73-76 O '64. (MIRA 17:11)

BORISOV, Yu.S., kand. tekhn. nauk; KORNEV, V.K., inzh.; PUSHKASH, I.I., inzh.;
YANTSEN, B.D., inzh.; PAREN'KOV, A.Ye.; ZAVARNITSYN, D.A.

Using liquid fuel in blast furnaces of the Nizhniy Tagil
metallurgical combine. Stal' 25 no.6:497-503 Je '65.
(MIRA 18:6)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat i Ural'skiy
nauchno-issledovatel'skiy institut chernykh metallov.

BORISOV, Yu.S.

Computing the theoretical temperature of combustion in
a combined blast-furnace air blow. Stal' 25 no.10:
884-890 O '65. (MIRA 18:11)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh
metallov.

BORISOV, Yu.V., kand.istoricheskikh nauk

Highway of humanity. Nauka i zhizn' 28 no.8:1-5 Ag '61.
(MIRA 14:8)
(Communism) (Russia--Economic policy)

SOV/46 4-4-10/20

AUTHORS: Bebchuk, A.S., Borisov, Yu.Ya., and Rozenberg, L.D.

TITLE: On the Problem of Cavitation Erosion (K voprosu o kavitatsionnoy erozii)

PERIODICAL: Akusticheskiy Zhurnal, 1958, Vol 4, Nr 4, pp 351-352 (USSR,

ABSTRACT: In Refs 1-3 it was shown that the magnitude of cavitation erosion depends on the number of bubbles formed and the rate of their collapse, which determines the strength of the shock wave produced on collapse of such bubbles. The mean level of the cavitation noise depends also on the number and rate of collapse of bubbles and there should be, therefore, a relationship between the cavitation noise and the cavitation erosion. The present paper describes the experimental work on the subject of this relationship. The cavitation erosion was observed at the flat end surface of an aluminium sample subjected to 8.1 kHz acoustic vibrations. Three series of experiments were made: in water, in water with a surface-active substance OP-10 and in acetone. In all cases the time of irradiation was 6 minutes. In each series measurements were made at three distances of the acoustic source from the flat end of the aluminium sample; these distances were 0.5, 1.5 and 2.25 mm. The cavitation erosion was measured by

Card 1/3

SOV/46-4-4-10/20

On the Problem of Cavitational Erosion

determining the loss in weight of the sample. The cavitation noise was measured with a probe (developed by Yu.A. Borisov) consisting of a metal rod with a barium titanate ring pushed onto it. This metal rod had a cross-section similar to that of the aluminium sample and was placed in the same position as the sample, with respect to the acoustic source. Care was taken to eliminate standing waves in the probe and transmission of the acoustic energy through the curved surface of the probe: only the flat end surface of the probe was meant to receive the acoustic energy. Most of the power radiated by the vibrator source was dissipated in cavitation; only a small proportion of the power was spent on producing sound directly. The results are shown in the figure on p 391. The ordinate shows the mass lost by cavitation (in grams), while the abscissa gives the mean square of the cavitation pressure (in atmospheres). The meaning of the experimental points

Card 2/3

SOV/46-4-4-10/20

On the Problem of Cavitation Erosion

in the figure on p 361 is as follows: 3, 2, 1 represent the results obtained in acetone; 8, 7, 5 - in water with OP-10; 9, 6, 4 - in water. Within the ranges of the erosion (1:100) and pressure (1:50) studied by the authors the experimental points lie approximately on a straight line. There are 1 figure, 1 table and 3 Soviet references.

ASSOCIATION: Akusticheskiy institut, AN SSSR, Moscow (Acoustical Institute, Academy of Sciences of the U.S.S.R., Moscow)

SUBMITTED: August 14, 1958

Card 3/3

ACCESSION NR: AR4014414

8/0124/64/000/001/B023/B023

SOURCE: RZh. Mekhanika, Abs. 1B130

AUTHOR: Borisov, Yu. Ya.

TITLE: Methods for measuring sound fields

CITED SOURCE: Tr. 1-y Vses. nauchno-tekhn. konferentsii po probl. vibratsion. i pul'satsion. goreniya. M., 1962, 31-35

TOPIC TAGS: sound, sound field, pressure measurement, piezoelectric probe, coaxial cable, wave guide

TRANSLATION: The construction of a piezoelectric waveguide probe for the measurements of sound pressures under cavitation conditions has been described.

It is well known that piezoelements have a linear amplitude characteristic up to very high sound pressures; being of sufficiently small size, they introduce a negligible distortion into the sound field and exhibit excellent frequency characteristics. Nevertheless, one cannot use the piezoelements directly in the presence of cavitation and high temperatures since the sensing elements become quickly destroyed and lose their piezoelectric properties.

Card 1/2

ACCESSION NR: AR4014414

The author proposes to separate the medium subjected to measurements and the piezometer by an acoustic waveguide which satisfies the following requirements: it has a linear amplitude characteristic, shows no velocity dispersion, exhibits a flat frequency characteristic, and is not damaged by the medium. Such demands are satisfied very well by the high frequency coaxial cable in which the copper core transmits the elastic oscillations while the polyethylene layer contributes to the damping.

The article describes in details the wide-band ultra sound probe RK-19 wave-guide and the methodology of the measurements. There are 4 references. Ye. F. Afanas'yev.

DATE ACQ: 18Feb64

SUB CODE: PH, GE

ENCL: 00

Card 2/2

PHASE I BOOK EXPLOITATION

SOV/4876

Borisov, Yulian Yaroslavovich, and Leonid Olegovich Makarov

Ul'trazvuk v tekhnike nastoyashchego i budushchego (Ultrasound in Engineering Today and in the Future) Moscow, Izd-vo AN SSSR, 1960. 86 p.
25,000 copies printed. (Series: Akademiya nauk SSSR. Nauchno-populyarnaya
seriya)

Resp. Ed.: L. D. Rozenberg; Ed. of Publishing House: Ye. P. Moskatov;
Tech. Ed.: G. S. Simkina.

PURPOSE: This booklet is intended for physicists and engineers interested in
the scientific and practical applications of ultrasound.

COVERAGE: The booklet is one of a popular science series and discusses practical
possibilities of ultrasound engineering, some problems in ultrasonics
which require laboratory research, and the use of ultrasound in the control
and analysis of industrial processes, for precipitating dust and smoke, in

Card 14

Ultrasound in Engineering Today and in the Future

SOV/4876

medicine, etc. Figures and drawings of some Soviet ultrasonic equipment are included. Some American and English ultrasonic equipment and contributions to the field are also discussed. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

From the Author	3
Ch. I. Ultrasound Changes the Properties of a Medium	5
Secrets of bubbles [ultrasonic cavitation in cleaning and emulsification]	5
Quiet workers [cavitation bubbles]	10
The bubbles float to the surface [coagulation of cavitation bubbles]	12
Ultrasound cleans the air [coagulation of aerosols in an ultrasonic field]	14
Separation of mixtures	18
Ultrasound cuts glass	19

Card 24

BORISOV, Yu.Ya.; STATNIKOV, Yu.G.

Streams arising in a standing sound wave. Akust. zhur. 11 no.1:35-
41 '65. (MIRA 18:4)

1. Akusticheskiy institut AN SSSR, Moskva.

S/046/62/008/001/014/018
B125/B102

AUTHORS: Borisov, Yu. Ya., Gynkina, N. M.

TITLE: Acoustic drying in a standing sound wave

PERIODICAL: Akusticheskiy zhurnal, v. 8, no. 1, 129 - 131

TEXT: The authors studied acoustic drying as a function of the position of the material in a standing sound wave with the device shown in Fig. 1. During this study, the numerous factors affecting drying in a sonic field are to be separated. The higher harmonics occurring with high sound levels were eliminated by a one-member low-frequency filter with a cut-off frequency of ~1500 cps. The sound pressure measured with a cylindrical sound receiver was transmitted to an M-2 (MVL-2M) vacuum tube, or to an A-3 (AS-3) spectral analyzer. Fig. 2 shows results obtained by averaging over 15-fold measurements in 0.4 mm thick and 10x10 mm large specimens of filter paper (initial humidity 41 ± 1%). The relative error at more than 8% humidity did not exceed 10%, and increased to 25% with decreasing humidity. Curves 1, 2, 3, 4 of Fig. 2 show the drying of the specimens in the pressure loop of the standing sound wave

Card 1/B

S/046/62/008/001/014/018
B125/B102

Acoustic drying in a standing...

at sound pressures of 150 - 163 db. Though the rate of desiccation increases with increasing sound pressure, sound pressure is not the decisive factor in drying of capillary porous materials in a standing sound wave. The high energy levels of the above-described dry chamber are probably necessary for the generation of intense circulating flows on the drying surfaces, and thus for the removal of humidity from these surfaces. Owing to the temperature difference of 3 to 4°C between pressure loop and pressure node, curve 5 of Fig. 2 was taken at a lower temperature. All other curves were taken at 32°C. A. K. Gorokhov and L. A. Monakhova took part in the present investigation. The following monographs are mentioned: A. V. Lykov. Teoriya sushki (Theory of drying). M.-L., Gosenergoizdat, 1950; I. I. Slavin. Proizvodstvennyy shum i bor'ba s nim (Production noise and its control). M., Profizdat, 1955. There are 2 figures and 5 references: 3 Soviet-bloc and 2 non-Soviet-bloc. The two references to English-language publications read as follows: E. Brun, R. M. G. Boucher. Research on the acoustic air-jet generator. A new development. J. Acoust. Soc. America, 1957, 29, 5, 573 - 583; R. M. G. Boucher. Drying by airborne ultrasonics. Ultrason. News, 1959, 2, 8 - 9, 14 - 17.

Card 2/4

Acoustic drying in a standing...

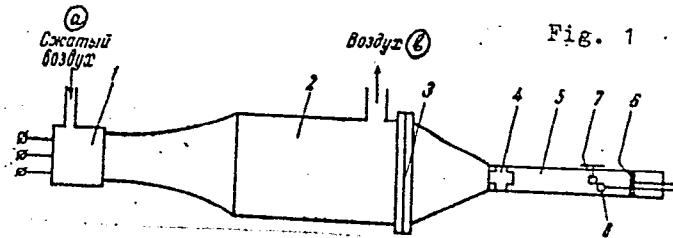
S/046/62/008/001/014/018
B125/B102

ASSOCIATION: Akusticheskiy institut AN SSSR Moskva (Acoustics Institute
of the AS USSR, Moscow)

SUBMITTED: July 26, 1961

Legend to Fig. 1: (1) Dynamical 800-w siren of the type UZG-7G (UZG-7G),
(2) antechamber, (3) separating diaphragm, (4) acoustic filter, (5)
receiver. (a) dry air, (b) air.

Fig. 2. Time dependence of humidity. W in % abs., t in sec., pressures
in decibel.



Card 3/4

L 30093-65

ACCESSION NR: A5004084

S/0000/62/000/000/0031/0035

AUTHOR: Borisov, Yu. Ya.

TITLE: A method for the measurement of sound fields

SOURCE: Vsesoyuznaya nauchno-tehnicheskaya konferentsiya po probleme vibratsion-
nogo i pul'satsionnogo goreniya. 1st, 1961. Trudy. Moscow, Sektor nauchno-tehn.
inform. GIAP, 1962, 31-35

TOPIC TAGS: acoustics, sound pressure, sound field measurement, high temperature sound measurement, sound wave guide, piezoelectric probe, cavitation sound, magnetostriction, pulsed combustion

ABSTRACT: The use of acoustic energy for the intensification of combustion processes and for the study of vibrational burning is hampered by difficulties related to the measurement of intensive sound fields existing or artificially produced within the combustion chamber. Converters with protected piezo-elements for measurements in liquid media in the presence of cavitations were developed at the Akusticheskiy institut Akademii nauk SSSR (Acoustics institute of the Academy of Sciences SSSR) during the 1957-1958 period (Yu. Ya. Borisov, Tekhnichko-informatsionnyy byulleten' OKB ETO, no. 5 (11), p. 37, Leningrad, 1959). However, although these converters

Cont. 1/2

24

B+

L 30093-65

ACCESSION NR: AT5004084

could operate in very strong sound fields, they were originally unsuitable for high temperature work. Since no direct contact is possible between the piezoelements and the hot media, one must interpose an acoustic wave guide which must have linear characteristics, show no velocity dispersion, show a flat characteristic within the frequency region under study, and be temperature and corrosion resistant. The article describes in considerable detail the preliminary studies, design, construction, calibration, and test operation of a piezoelectric probe containing a wave guide and earmarked for the measurement of sound pressures under cavitation conditions. The article concludes with a brief note describing the basic properties of the existing magnetostriction probes (E. Meyer, J. Acoust. Soc. America, vol. 29, no. 1, p. 4, 1957; J. Koppelman, Acustica, vol. 2, p. 92, 1952). Orig. art. has: 1 figure and 1 formula.

ASSOCIATION: None

SUBMITTED: 29Dec62

NO REF Sov: 001

ENCL: 00

SUB CODE: GP, FP

OTHER: 003

Card 2/2

I 40548-65 EWT(1)/EPF(n)-2/EED(t)-3 Pu-4 IJP(c) WW/GS
ACCESSION NR: AT5004091 S/0000/62/000/000/0084/0088

23
22
B+1

AUTHOR: Borisov, Yu. Ya.

TITLE: Aerodynamic radiators for industrial uses

SOURCE: Vsesoyuznaya nauchno-tehnicheskaya konferentsiya po probleme vibratsionnogo i pul'satsionnogo goreniya. 1st, 1961. Trudy. Moscow, Sektor nauchno-tekhn. inform.

GIAP, 1962, 84-88

TOPIC TAGS: sound production, sound source, aerodynamic acoustic source, dynamic siren, static siren, industrial acoustics, aerosol coagulation

ABSTRACT: The need of intensive oscillations of gaseous media for industrial purposes, on the one hand, and the lack of appropriate strong acoustic sources (in gases), on the other, resulted in the production (in the Soviet Union, without prior theoretical and experimental study) of gas-flow acoustic generators which have very uneven acoustical and operational characteristics. After mentioning some similar endeavors abroad (notably in France), the author presents a survey of the existing high-power dynamic sirens and lists their comparative characteristics. He concludes by mentioning the recent attempts of NIIOGAZ and GIPRONIKEL' to construct static sirens earmarked for acoustic coagulation of.. aerosols. One such 1.4 Kw siren, designed by NIIOGAZ and disclosed at the Conference on

Card 1/2

L 40548-65

ACCESSION NR: AT5004091

Industrial Applications of Ultrasound held in Moscow in November of 1960, operates at 40% efficiency. Orig. art. has: 1 table.

ASSOCIATION: none

SUBMITTED: 29Dec62 ENCL: 00 SUB CODE: IE, FP

NO REF SOV: 005 OTHER: 003

Card 2/2 BH8

L 38122-65 EWT(1)/EPF(n)-2/EED(b)-3 Pu-4 IJP(c)
ACCESSION NR: AP5006177 S/0046/65/011/001/0035/0041

AUTHOR: Borisov, Yu. Ya.; Statnikov, Yu. G.

TITLE: Concerning the fluxes produced in a standing sound wave

SOURCE: Akusticheskiy zhurnal, v. 11, no. 1, 1965, 35-41

TOPIC TAGS: sound energy, sound wave, standing wave, Reynolds number, energy density

ABSTRACT: The purpose of the investigation was to estimate theoretically and experimentally the rates of flow excited by a sound wave at high acoustic-energy densities, with practical applications such as acoustic drying of materials in view. It is pointed out in the introduction that little research was done on other than liquid media, especially the boundary between a solid and a gas. An analysis of the flux produced in an acoustic wave has shown that the Rayleigh solutions are valid only at relatively low energy density, and are inapplicable when the Reynolds number exceeds unity. The experiments were performed in a round tube 40 mm in diameter, using a dynamic siren as a sound source. The absolute velocities were

Card 1/2

L 38:22-65
ACCESSION NR: AP5006177

measured by photographing particles suspended in the air with a high-speed camera (up to 1500 frames/sec), and with a Pitot tube and a thermobanemometer. The flow configuration agreed with that derived by Rayleigh, but the flow rate was one order of magnitude larger at a sound-energy level of about 140 dB, corresponding to an approximate Reynolds number of 1100. Orig. art. has: 6 figures and 14 formulas.

ASSOCIATION: Akusticheskiy institut AN SSSR, Moscow (Acoustics Institute, AN SSSR)

SUBMITTED: 26Feb64 ENCL: 00 SUB CODE: GP
NR REF Sov: 009 OTHER: 009

mlc
Card 2/2

L 15965-66 EWT(1)/EWP(e)/EWT(m)/EPF(n)-2/EWP(j)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/ETC(m)-6
ACC NR: AP6001998 IJP(c) SOURCE CODE: UR/0170/65/009/006/0741/0743
JD/WH/RM/WH

AUTHOR: Dolgopolov, N. N.; Simonyan, S. G.; Borisov, Yu. Ya.

ORG: Institute of New Structural Materials, Moscow (Institut novykh stroitel'nykh materialov)

TITLE: Kinetics of acoustic drying of capillary porous materials

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 9, no. 6, 1965, 741-743

TOPIC TAGS: quartz, acoustic effect, polyurethane, drying

ABSTRACT: The kinetics of acoustic drying were studied on quartz sand the bulk of which (88.3%) consisted of particles 0.355 - 1 mm in size, and contained moisture in the proportion of 0.164 kg/kg. The samples were subjected to various levels of sound pressure (158, 163, and 167 db) at 7 - 15 kc, then analyzed for their moisture content. At the same time, the temperature distribution over the samples was measured with thermocouples. The drying curve was found to consist of three portions: (1) a period of increasing drying rate, (2) constant rate, (3) decreasing rate. Another material studied was polyurethane foam, a material of high moisture absorption coefficient (up to 800%). It was dried at

Card 1/2

UDC: 66.047.59

L 15965-56

ACC NR: AP6001998

sound pressure levels of 155, 165, 167, and 169 db. The drying rate was found to be greatly accelerated by the increasing sound rate. The moisture is eliminated not only by evaporation, but also by mechanical expulsion: dripping was observed at 169 db. The experiments show that in comparison with other methods, the acoustic method permits a several-fold acceleration of the drying process and a simultaneous lowering of the temperature of the material. Orig. art. has: 3 figures.

SUB CODE: 07, 11 / SUBM DATE: 29Mar65 / ORIG REF: 002 / OTH REF: 003

bvk

Card 2/2

L 50347-65 EWT(1)/EFF(n)-2/EED(b)-3 Pu-4 IJP(c) WW
ACCESSION NR: AP5013699 UR/0046/65/011/002/0140/0147

AUTHOR: Borisov, Yu. Ya.; Ginin V. N.; Gynkina, N. M.

TITLE: Development and testing of the GSI-4 stem gas-jet generator 21

SOURCE: Akusticheskiy zhurnal, v. 11, no. 2, 1965, 140-147

TOPIC TAGS: acoustic generator, gas jet generator, supersonic wave

ABSTRACT: A series of investigations was conducted in 1962—1963 with the objective of developing a powerful, commercial-type acoustic gas-jet generator that would operate without discharging air into the medium exposed to sound. The Hartmann acoustic generator (the improved stem version) was used as a prototype. Several models were built, differing from one another with respect to the type of reflector, regulation (adjustment mechanism), and air-discharge methods, but having almost identical nozzles and oscillators. The GSI-4 generator was studied by determining its frequency and the acoustic-radiation output as functions of regulation. In addition, the distribution of statistical and total air pressure in the jet was studied in order to gain insight into the sound-generation mechanism, and to determine some of the gas-dynamic characteristics of the generator. These experiments, which were carried out at the Acoustics Institute in Moscow, are not considered

Cord 1/2

24

23

B

L 50347-65
ACCESSION NR: AP5013699

complete enough to warrant definite conclusions. It appears likely, however, that the relation between the diameter of the oscillator and that of the nozzle has a definite bearing on the generator's gas-dynamic and acoustical characteristics. This relation cannot be chosen without regard to such variables as the depth of the oscillator and the distance between oscillator and nozzle, which can be adjusted with a micrometer screw. It is noted that the GSI-4 generator, in practical use, yielded results close to those obtained in laboratory tests. The difference in power output between different models did not exceed 20%. Volume of air discharged is 2.8-2.9 cubic meters per min at a gage pressure of 3.5 atm, maximum efficiency is 20-24%, and the average efficiency is 8-10%. Orig. art. has: 8 figures and 1 table. [VM]

ASSOCIATION: Akusticheskiy institut AN SSSR, Moscow (Acoustics Institute, AN SSSR)

SUBMITTED: 17Apr64

ENCL: 00

SUB CODE: GP

NO REF SOV: 004

OTHER: 004

ATD PRESS: 4006

me
Card 2/2

BORISOV, Zdr.

David Livingstone, great explorer in Africa; 1813-1873. Nauka i tekhnika mladezh 14 no.4:14-15 Ap '62.

BORISOV, Z.

"Development of Uncultivated and Barren Land in the Soviet Union", P. 7,
(GEOGRAFIJA, Vol. No. 4, 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1,
Jan. 1955, Uncl.

BORISOV, Z.

"Geographical division of rice production in Bulgaria."

P. 163 (Priroda I Znanie, Vol. 11, nos. 1-3, Jan.-Mar. 1958, Sofiia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 7, July 1958

BORISOV, Zdravko

Economic geographical characteristics and agricultural problems
of the Sandanski-Petrich subregion. Godishnik biol 54 no.3:
47-99 '59/'60 [publ. '61].

VELCHEV, Ivan; BORISOV, Zdravko; KRUSTEV, Krustiu

The Lovech suburban zone from the viewpoint of economic
geography. Godishnik biol 55 no.3:229-259 '60/'61 [publ. '62].

DINEV, Liubomir; VELCHEV, Ivan; BORISOV, Zdravko; KRUSTEV, Krustiu

Structural characteristics, distribution, and problems
of the labor resources coming from the Peinik District.
Godishnik biol 57 no.2:201-250 '62-'63 [publ. '64].

BORISOV, Zdravko

The Razlog microdistrict. Godishnik biol. 57 no.2:251-307
'62-'63 [publ. '64].

BORISOV, Z.A., inzh.

The NSh-10D hydraulic gear pump. Mashinostroenie no. 1:96-97
Ja-F '65. (MIRA 18:4)

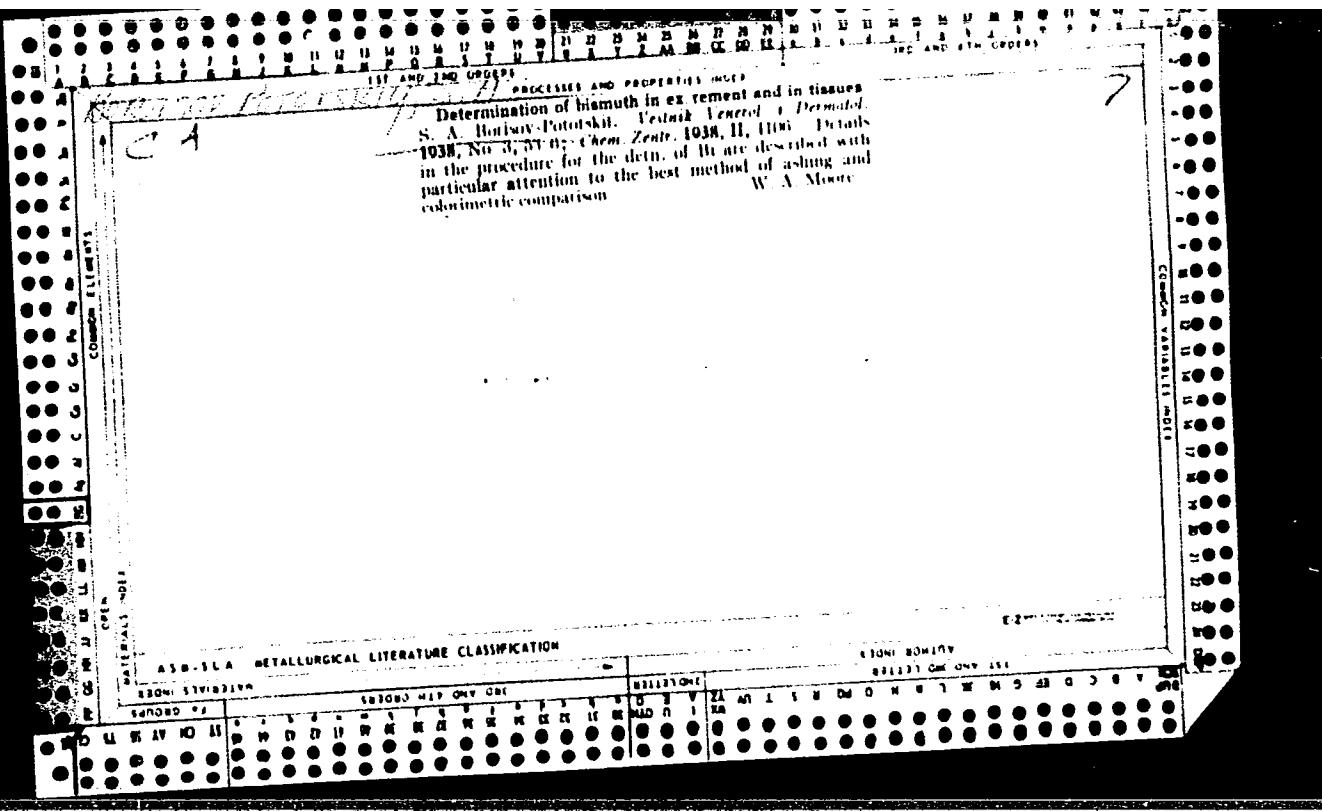
BORISOV-BOGOLYUBOV, B., general-mayor intendantskoy sluzhby;
YABLON'KA, P., podpolkovnik intendantskoy sluzhby

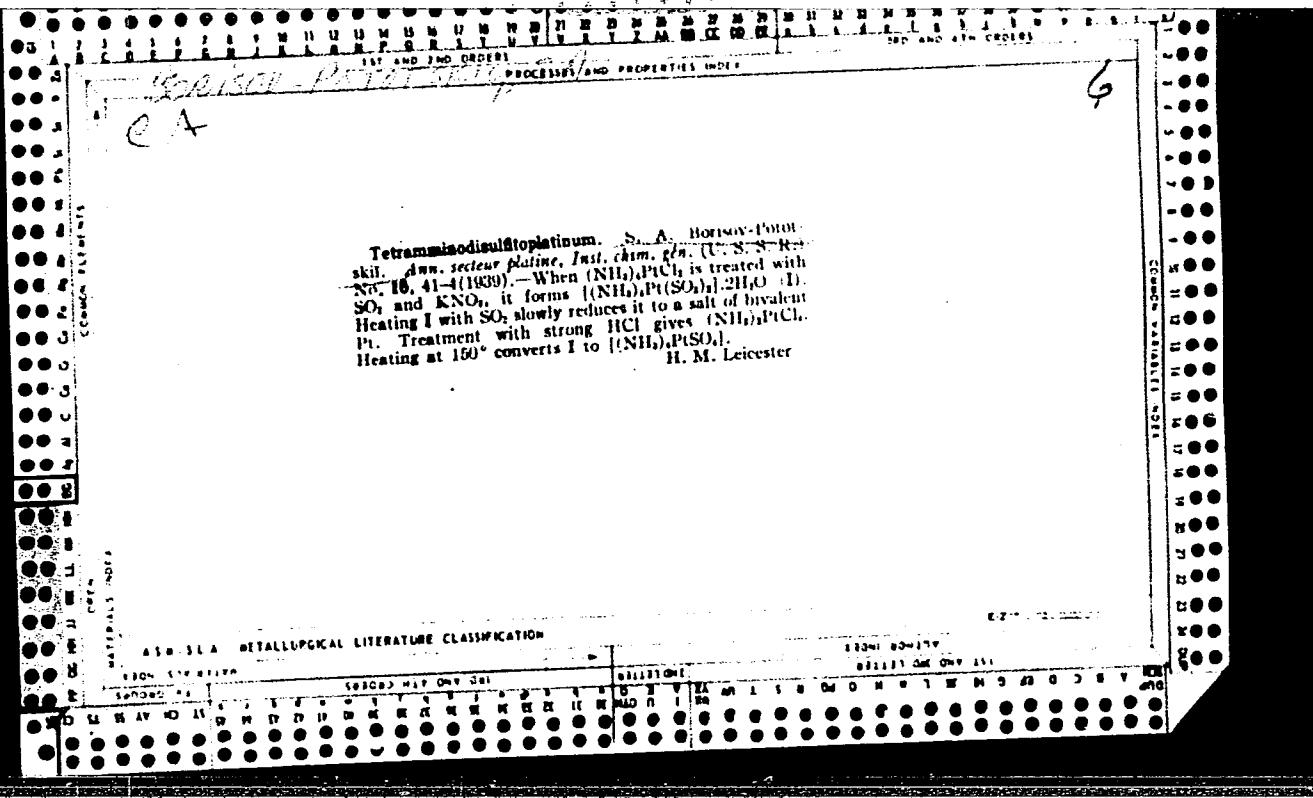
Progressive method of financial planning. Tyl i snab. Sov.
Voor. Sil 21 no.10:54-55 O '61. (MIRA 15:1)
(Russia--Army--Finances)

BORISOV-ETINGOF, Ye.

For those who inquire, think, and create. Izobr. i rats. no.8:
35-36 Ag '62. (MIRA 15:9)

1. Zamestitel' glavnogo redaktora izdatel'stva "Znaniye".
(Bibliography--Technology)





BORISOV-POTOTSKIY, Sergey Aleksandrovich; ALAVERDOV, Ya.G., red.;
GARINA, T.D., tekhn. red.

[Qualitative semimicroanalysis; laboratory manual] Kache-
stvennyi polumikroanaliz; praktikum. Moskva, Gos. izd-vo
"Vysshiaia shkola," 1961. 254 p. (MIRA 15:4)
(Chemistry, Analytical--Laboratory manuals)

BORISOV-REBRIN, M. P

DAYN, A.I., inzh.; BORISOV-REBRIN, M.P., inzh.

Improve the production of rock, sand, and gravel used for
building materials. Mekh.trud.rab. 11 no.8:30-33 Ag '57.
(MIRA 10:11)

(Building materials)

BORISOV-KERIN, M. P.

Mechanized extraction and processing of rock products for use in
building. Stroi.mat. 4 no.5:32-34 My '58. (MIRA 12:4)

1. Nachal'nik Glavmosnerudproma.
(Quarries and quarrying) (Sand and gravel plants)

BORISOV-REBRIN, M., DAYN, A.

P.
Internal potentialities in the nonmetallic mineral industry. Fin.
SSSR 20 no.4:37-42 Ap '59. (MIRA 12:6)
(Building materials industry--Finance)

BORISOVA, A.A., kand. med. nauk

Experience in the treatment of trophic ulcers with an acidophilic
paste. Vest. derm. i ven. 38 no.3:75-77 Mr '64.

(MIRA 18:4)

1. Kafedra kozhnykh bolezney (zav. - prof. L.A. Neradov) i biokhimii
(zav. - prof. N.P. Pyatnitskiy) Kubanskogo meditsinskogo instituta
(rektor - dotsent V.A. Latyshev) i Krasnodarskiy venerologicheskiy
dispanser (glavnyy vrach I.N. Shirkov).

KARAGEZYAN, M.A., kand. med. nauk; DORISOVA, A.A., kand. med. nauk

Medicinal properties of squash carotene in skin diseases.
(MIRA 18:6)
Vest. derm. i ven. 38 no.12:49-51 D.164.

1. Kafedra kozhnykh bolezney (zav.- prof. I.A. Neradov)
Kubanskogo meditsinskogo instituta i Krasnodarskiy gorodskoy
venerologicheskij dispanser (glavnnyy vrach I.N. Shirkov).

BORISOVA, A. A.

"Data on a Study of the Functional Capacity of the Kidneys in Syphilis." Cand Med Sci, Krasnodar City Dermatovenereology Dispensary, Kuban Medical Inst, Krasnodar, 1954. (RZhBiol, No 5, Mar 55)

SO: Sum. No. 670, 29 Sep 55—Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

BORISOVA, A.A.

Role of the biology teacher in the aesthetic training of pupils.
Biol.v shkole no.1:41-45 Ja-F '60. (MIRA 13:5)

1. Ul'yanovskiy institut usovershenstvovaniya uchiteley.
(Biology--Study and teaching)

BORISOVA, A. G.

"Geographical Analysis of Caucasian Astragalus and Their Genetic Relation," Botan. zhur., 33, No.3, 1947

Botanical Inst. im. Komarov

PA 17/49T^F6

BORISOVA, A. G.

USSR/Medicine - Botany
Medicine - Taxonomy

May/Jun 48

"Geographical Analysis of Caucasian Astragali and
Their Genetic Relation," A. G. Borisova, Bot Inst
imeni V. L. Komarov, Acad Sci USSR, Leningrad, 7 pp

"Botan Zhur" Vol XXXIII, No 3

Two hundred seven species of astragalus are found in
Caucasus, i.e., about 25 percent of the total number
of astragal species in USSR. Over 80 species are
endemic to Caucasus. Describes some species in de-
tail. Submitted 10 Aug 47.

17/49T^F6

BORISOVA, A. G.

Borisova, A. G.- "On the Classification of the genus of Trangacantaha Mill,"
Botan. materialy Gerbariya Botan. in-ta im. Komarova Akad. nauk SSSR, Vol. XI, 1949,
p. 104-07

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh 'statey, No. 16, 1949).

Compilers: BORISOVA, A. G.; VASIL'YEV, V. N.; GORSHKOVA, S. G.; ILIN, M. M.; KLOKOV, M. V.
MALEYEV, V. F.; MURAV'YEV, O. A.; POBEDIMOVA, Ye. G.; POYARKOVA, A. I.; PROKHANOV, Ya. I.;
SHISHKIN, B. K.; SHTEYNBERG, Ye. I.; YUZEPCHUK, S. V.; AFANAS'YEV, K. S.; KOMAROV, V. L.
(Acad.); Editors: SHISHKIN, B. K.; BOBROV, Ye. G.

Flora of the USSR, Vol. 15, Moscow-Leningrad, 743 pp. 1950

Book W-22202, 7 Apr 52

BORISOVA, A.G.

BLINOVSKIY, K.V.; BORISOVA, A.G.; VASIL'CHENKO, I.T.; MEFFERT, V.V.;
NIKITIN, V.V.; POYARKOV, A.I.; SHAPARENKO, K.K.; FEDCHENKO, B.A.;
SHISHKIN, B.K.; ENDEN, O.A.; VASIL'YEV, A.O., tekhnicheskij redaktor;
PETROVA, K.T., tekhnicheskij redaktor

[Flora of Turkmenistan] Flora Turkmenii. Ashkhabad, Izd-vo Turkmen-
skogo filiala Akad.nauk SSSR. Vol.4. 1950. 271 p. (MIRA 10:7)

1. Chlen-korrespondent Akademii nauk SSSR (for Shishkin)
(Turkmenistan--Botany)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206410011-6

BORISOVA, AG.

Astragalus and tragacanth of Crimea
Bot. mat. Gerb. 14, 1951

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206410011-6"

BORISOVA, A.G.

Genus Olea. Flora SSSR 18:512-516 '52.

(MLRA 6:5)
(Olive)

BORISOVA, A.G.

New genus of the family Labiateae from Central Asia. Bot.mat.Gerb.
15:321-324 '53. (MLRA 7:2)
(Asia, Central--Labiatae) (Labiatae--Asia, Central)

BORISOVA, A.G.

Classification of the tribe Satureineae Benth. of the family
Labiatae in the flora of the U.S.S.R. Bot.mat.Gerb. 15:325-331
'53.
(MLRA 7:2)
(Labiatae)

BORISOVA, A.G.; SHISHKIN, B.K., redaktor; GOLOVIN, M.I., redaktor;
PEVZNER, R.S., tekhnicheskij redaktor.

Flora of Transbaikalia. Angiospermae-Dicotyledons (Leguminosae).
Flora Zabailak'ia. no.6:546-663 '54.
(MLRA 8:6)

1. Chlen-korrespondent Akademii nauk SSSR (for Shishkin)
(Transbaikalia—Leguminosae)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206410011-6

BORISOVA, A.G.

Species of the genus *Bergenia* Moench in Central Asia. Bot.
mat. Gerb. no. 16:97-103 '54. (MIRA 8:9)
(Asia, Central--Tannins)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206410011-6"

BORISOVA,A.G.

New species from the Labiate family. Bot. Mat. Gerb.
no.16:274-285 '54. (MLRA 8:9)
(Labiatae)

BORISOVA, A.G.

Genera *Thuspeiantha*, *Brunella*. Flora SSSR 20:231-233; 493-498
'54.
(Labiatae) (MLRA 7:?)

BORISOVA, A.G.; BOCHANTSEV, V.P.; BUTKOV, A.Ya., dotsent; VASIL'KOVSAYA, A.P.; VVEDENSKIY, A.I., dotsent; GOLODKOVSKIY, V.L.; GONCHAROV, H.F. [deceased]; DROBOV, V.P., professor; KOROTKOVA, Ye.Ye.; KOSTINA, K.F.; KUDRYASHEV, S.N. [deceased]; LAKHINA, M.M.; LINCHEVSKIY, I.A.; MIRONOV, B.A. [deceased]; PAZIY, V.K.; POYARKOVA, A.I.; PROTOPPOPOV, G.F.; SUMNEVICH, G.P. [deceased]; KHAL'ZOVA, K.P.; YUZEPCHUK, S.V.; KOROVIN, Ye.P., professor, glavnnyy redaktor; ZAKIROV, K.Z., professor, redaktor; SHIPUKHIN, A.Ya., redaktor izdatel'stva

[The gloria of Uzbekistan] Flora Uzbekistana. Glav. red. E.P.Korovin. Tashkent, Izd-vo Akademii nauk UzSSR. Vol.3. 1955. 825 p. (MLRA 9:10)

1. Deystvitel'nyy chlen AN UzSSR (for Korovin)
(Uzbekistan--Botany)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206410011-6

BORISOVA, A.G.

New species of the genus Veronica L. Bot.mat.Gerb. 17:341-356
'55. (MLRA 9:5)
(Speedwell)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206410011-6"

BORISOVA, A.G.

Systematics and economic importance of the herb *Bergenia Moench.*
Trudy Bot.inst.Ser.5 no.4:297-339 '56.
(*Saxifrage*) (MLRA 9:6)

BORISOVA, A.G.

Survey of the new genus *Halimiphyllum* (Magl.) Beriss. (fam. Zygophyllaceae Lindl.). Bot. mat. Gerb. 18:144-156 '57. (MLRA 10:6)
(Caltrep)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206410011-6

BORISOV^Y, A. G.

IKONNIKOV, S.S.; ISMAILOV, M.; KNORRING, I.G.; KOROLEVA, A.S.; KUDRYASHEV,
S.N.; MALEYEV, V.P.; MASLENNIKOVA, T.I.; NEVSKIY, S.A.; NIKITIN, V.A.;
OVCHINNIKOV, P.N.; PLESJKO, S.I.; POPOV, N.G.; SIDORENKO, G.T.;
CHUKAVINA, A.P.; SHIBKOVA, I.F.; BORISOV^Y, A.G., redaktor; VASIL'CHEV-
KO, I.T., redaktor; NMUSTRUYEVA, O.E., redaktor; ZENDEL', R.Ye.,
tekhnicheskiy redaktor

[Flora of the Tajik S.S.R.] Flora Tadzhikskoi SSR. Moskva, Izd-vo
Akad.nauk SSSR. Vol.1. [Pteridophyta - Gramineae] Paprotnikoobraznye-
zaki. Glav.red. P.N.Ovchinnikov. 1957. 547 p. (MIRA 10:9)
(Tajikistan--Botany)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206410011-6"

BORISOVA, A.G.

Ol'ga Evertovna Knorring-Neustrueva. Bot.zhur. 43 no.3:454-456 Mr
'58. (MIRA 11:5)

1. Botanicheskiy institut im. V.L. Komarova AN SSSR, Leningrad.
(Knorring-Neustrueva, Ol'ga Evertovna, 1887)

BORISOVA, A.G.; BOCHANTSEV, V.P.; VASIL'CHENKO, I.T.; GOLUBKOVA, V.F.;
GORSHKOVA, S.G.; GRUBOV, V.I.; KIRPICNIKOV, M.E.; SMOL'YANINOVA, L.A.;
TAMAMSHYAN, S.G.; TSVELEV, N.N.; YUZEPCHUK, S.V.; KOMAROV, V.L.,
akademik, glavnnyy red.; SHISHKIN, B.K., red.izdaniya; BOBROV, Ya.G.,
doktor biol.nauk, prof., red.; SMIRNOV, A.V., tekhn.red.

[Flora of the U.S.S.R.] Flora SSSR. Moskva, Izd-vo Akad.nauk
SSSR. 1959. 630 p. (MIRA 12:8)

1. Chlen-korrespondent AN SSSR (for Shishkin).
(Compositae)

BORISOVA, A.G.; BOCHANTSEV, V.P.; VASIL'CHENKO, I.T.; GOLUBKOVA, V.F.;
GORSHKOVA, S.G.; GRUBOV, V.I.; KIRPICHNIKOV, M.E.; SMOL'YANINOVA,
L.A.; TAMAMSHIAN, S.G.; TSVALIEV, N.N.; TSVETKOVA, L.I.; YUZEP-
CHUK, S.V.; SHISHKIN, B.K., red.toma; BOBROV, Ye.G., doktor
biol.nauk, prof., red.: SMIRNOVA, A.V., tekhn.red.

[Compositae] Compositae. Moskva, Izd.-vo Akad.nauk SSSR, 1959.
630 p.(Akademija nauk SSSR. Botanicheskii institut. Flora
SSSR. no.25) (MIRA 13:4)
(Compositae)

VUL'F, Ye.V. [deceased]; BORISOVA, A.G. (Leningrad); VASIL'YEV, V.F.
[deceased]; POYARKOVA, A.I. (Leningrad); STANKOV, S.S.;
KHRZHANOVSKIY, V.O. (Moskva); CHERNOVA, N.M. (Simferopol');
YUZEPCHEV, S.V. [deceased]; PRIVALOVA, L.A., starshiy nauchnyy
sotrudnik, red.; ROSSOSHANSKIY, A.A., red.; GUREVICH, M.M.,
tekhn.red.

[Flora of the Crimea] Flora Kryma. Pod red. S.S.Stankova.
Moskva, Gos.izd-vo sel'khoz.lit-ry. Vol.2, no.2. [Dicotyledoneae:
Crassulaceae - Leguminosae] Dvudol'nye: tolstiankovye - bobovye.
(MIRA 14:1)
1960. 311 p.

1. Gosudarstvennyy Nikitskiy botanicheskiy sad (for Privalova).
(Crimea--Dicotyledons)

RAMENSKAYA, Marianna Leont'yevna; BORISOVA, A.G., kand.biolog.nauk,
nauchnyy red.; SHECHTER, D.I., red.; SHEVCHENKO, L.V., tekhn.red.

[Guide to the higher plants of Karelia] Opredelitel' vysshikh
rastenii Karelii. Petrozavodsk, Gos.izd-vo Karel'skoi ASSR,
1960. 484 p. (MIRA 13:12)
(Karelia--Botany)

BORISOVA, A.G.

Contribution to the systematics of the genus *Antennaria*
Gaertn. Bot.mat.Gerb. 20:289-295 '60. (MIRA 13:7)
(*Antennaria*)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206410011-6

BORISOVA, A.G.

On the taxonomy of the tribe Galegeae Brønn (family Leguminosae).
(MIRA 14:10)
Bot. mat. Gerb. 21:243-258 '61.
(Galegeae)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206410011-6"

BORISOVA, A.G.; KNORRING, O.E.; NEKRASOVA, V.L.

Ninetieth anniversary of the birth of Boris Aleksævich Fedchenko
(Dec. 27, 1872- Sept. 29, 1947). Bot. zhur. 47 no.6:897-907
Je '62. (MIRA 15:7)

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR,
Leningrad. (Fedchenko, Boris Alekseevich, 1872-1947)

BOBROV, Ye.G.; BONDARTSEV, A.S.; BORISOVA, A.G.; VASIL'KOV, B.P.;
VASIL'CHENKO, I.T.; GOLUBEKOVA, V.F.; GRUDZINSKAYA, I.A.;
YEGOROVA, T.V.; ZINNOVA, A.D.; IVANINA, L.I.; LEONOVA, T.G.;
MATSENKO, A.Ye.; PIDOTTI, O.I.; POBEDIMOVA, Ye.G.; POLYAKOV,
P.P.; POYARKOVA, A.I.; SAVICH, V.P.; SIN'KOVA, G.M.; SMIRNOVA,
Z.N.; SMOL'YANINOVA, L.A.; FEDOROV, Al.A.; KHARADZE, A.L.;
TSVELEV, N.N.; SHISHKIN, B.K. [deceased]; PEN'KOVA, G.A., red.;
BARANOVA, L.G., tekhn. red.; FRIDMAN, Z.L., tekhn. red.

[Botanical atlas] Botanicheskii atlas. Moskva, Sel'khozizdat,
1963. 501 p. (MIRA 16:12)

1. Chlen-korrespondent AN SSSR (for Shishkin).
(Botany—Atlases)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206410011-6

BORISOVA, A.G.

Review of the genus *Ammothamnus* Bge. Bot. mat. Corb. 22:172-179 '63.
(MIRA 17:2)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000206410011-6"

BORISOVA, A.G.; IL'IN, M.M.; KLOKOV, M.V.; LINCHEVSKIY, I.A.; POBEDIMOVA,
Ye.G.; SEMIDEL, G.L.; SOSKOV, Yu.D.; SOSNOVSKIY, D.I.;
TAMAMSHYAN, S.G.; KHARADZE, A.L.; TSVELEV, N.N.; CHEREPANOV, S.K.;
SHOSTAKOVSKIY, S.A.; BOBROV, Ye.G., doktor biol. nauk, prof.,
red. toma; SHISHKIN, B.K., red. izd. [deceased]; SMIRNOVA, A.V.,
tekhn. red.

[Tribes Cynareae and Mutisieae.] Kolena Cynareae i Mutisieae.
Moskva, 1963. 653 p. (Akademija nauk SSSR. Botanicheskij institut.
Flora SSSR, vol.28). (MIRA 16:12)

BORISOVA, A.G.; VASIL'YEV, V.N.; VASIL'CHENKO, I.T.; KIRPICHNIKOV, M.E.;
LEONOVA, T.G.; LIPSHITS, S.Yu.; TSVELEV, N.N.; CHEREPANOV, S.K.;
SMISHKIN, B.K. [deceased]; BOBROV, Ye.G., prof. doktor biol.nauk,
red. toma.

[Cichorioideae.] Cichorioideae. Moskva, Izd-vo Nauka, 1964. 796 p.
(Flora SSSR, vol.29) (MIRA 18:2)

BORISOVA, A.I., Cand Biol Sci -- (diss) "Changes and
adaptation~~s~~ ^{during} of respiration ~~in~~ singing." Kazan', 1958,
15 pp (Kazan' State Univ im V.I.Ulyanov-Lenin)
350 copies (KL, 29-58, 130)

- 27 -

KONOVA, I.V.; NERONOVА, N.M.; IYERUSALIMSKIY, N.D.; BORISOVA, A.I.

Determining vitamins and antibiotics by diffusion into agar. Report
No.2: Quantitative determination of vitamin B₁₂ and its derivatives
by paper chromatography. Mikrobiologija 28 no.4:490-494 Jl-Ag '59.

(MIRA 12:12)

1. Institut mikrobiologii AN SSSR.
(VITAMIN B₁₂ chem.)
(ESCHERICHIA COLI)